# ARCHYTAS ON SEEKING AND LEARNING: A TEXTUAL ISSUE Jean De Groot

# Archytas of Tarentum, 5<sup>th</sup>-4<sup>th</sup> centuries BC, mathematician and ruler of the Greek city, Taras, in southern Italy.

Archytas, Fragment 1: Porphyry, in Ptolem. Harm. P. 56 Düring; Nichomachus, Inst. Arith. 1 3, 4 p. 6, 16 Hoche; Iamblichus, Vit. Pythag. 160; in Nic. 6, 20; 9,1

Καλώς μοι δοκούντι τοὶ πεϱὶ τὰ μαθήματα διαγνώμεν, καὶ οὐθὲν ἄτοπον ὀϱθῶς αὐτούς, οἶά ἐντι, πεϱὶ ἑκάστου φϱονέν· πεϱὶ γὰϱ τᾶς τῶν ὅλων φύσιος καλῶς διαγνόντες ἔμελλον καὶ πεϱὶ τῶν κατὰ μέϱος, οἶά ἐντι, καλῶς ὀψεῖσθαι. Πεϱί τε δὴ τᾶς τῶν ἄστϱων ταχυτᾶτος καὶ ἐπιτολᾶν καὶ δυσίων παϱέδωκαν ἁμῖν σαφῆ διάγνωσιν καὶ πεϱὶ γαμετϱίας καὶ ἀριθμῶν καὶ οὐχ ἥκιστα περὶ μωσικᾶς. Ταῦτα γὰρ τα μαθήματα δοκοῦντι ἡμεν ἀδελφεά.

Those concerned with the sciences seem to me to discern well, and it is not at all surprising that they have correct understanding about individual things as they are. For, having distinguished well concerning the nature of wholes they were likely also to see well how things are in their parts. Indeed concerning the speed of the stars and their risings and settings as well as concerning geometry and numbers and not least concerning music, they handed down to us clear means of discernment. For these sciences seem to be akin. (Huffman)

Archytas, Fragment 3; Stobaeus, Fl. IV 1, 139; Iamblichus, d. comm. Math. Sc. § 44, 11–17

Δεῖ γὰϱ ἢ μαθόντα παϱ'ἄλλω ἢ αὐτὸν ἐξευϱόντα, ὧν ἀνεπιστάμων ἦσθα, ἐπιστάμονα γενέσθαι. τὸ μὲν ὧν μαθέν παϱ' ἄλλω καὶ ἀλλότϱιον, τὸ δ'ἐξευϱὲν δι'αὕταυτον καὶ ἴδιον· ἐξευϱὲν δὲ μὴ ζατοῦντα ἄποϱον καὶ σπάνιον, ζατοῦντα δὲ εὕποϱον καὶ ἑϱαδιον, μὴ ἐπιστάμενον δὲ ζητεῖν ἀδύνατον.

Huffman emendation:

... μὴ ἐπιστάμενον δὲ <λογίζεσθαι> ζητεῖν ἀδύνατον.

For it is necessary that one become knowledgeable of the things one did not know, either by learning from another or finding out for oneself. Learning is from another and belongs to the other, while finding out is through oneself and belongs to oneself. Without seeking, finding out is rare as there is no route to it, while by seeking, there is a way through and it is easy. But if one does not know how, it is impossible seek.

But if one does not know <how to calculate>, it is impossible to seek.

In Stobaeus, Fragment 3 continues, asserting the importance of  $\lambda o\gamma \iota \sigma \mu \delta \varsigma$  for balancing desires of disparate groups in the city. There is doubt about whether the passages belong together or whether there may be some text left out between the two passages.

### Archytas, Fragment 3

The puzzle of the passage is considered to be the last line, which most simply says, **A. Without knowing, it is impossible to seek**. μὴ ἐπιστάμενον δὲ ζητεῖν ἀδύνατον.

## <u>Iamblichus</u> (4<sup>th</sup> A.D.)

I-interpretation: It is impossible to seek what one does not know.

#### Huffman (2005)

H-: Not knowing how <to calculate>, it is impossible to seek.

#### Anonymous possibility

Not knowing how to seek, it is impossible [to discover](ἐξευρεῖν).

#### Diels-Kranz (1956)

Not knowing how [to seek], it is impossible to seek.

D-K-: Für den freilich, der es nicht versteht, ist das Suchen unmöglich.

De G trans. - For certainly, when one does not understand something, searching is impossible.

H-trans. - for the one who does not understand it, the search is impossible.

# De Groot today

**De G:** Not seeking, finding out is without a route and rare, while by seeking, [finding out] has a way through and is easy,

but without knowing how [in seeking], it is impossible to seek.

#### Works cited:

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